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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,626	09/03/2004	Yuichi Terada	DK-US020720	5169
22919 7590 03/24/2009 GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680				
EXAMINER				
RAHIM, AZIM				
ART UNIT		PAPER NUMBER		
3744				
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03/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/506,626

Applicant(s)

TERADA, YUICHI

Examiner

AZIM RAHIM

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/30/2009 has been entered.

Claim Objections

2. Claims 1-6, 10-14 and 17 are objected to because of the following informalities: In claim 1, lines 6-7, the recitation "the upper portion of the ventilation fan" should be corrected to recite -an upper portion of the ventilation fan-- to establish proper antecedent basis in the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-7 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunji et al. (US 2002/0144513) in view of Takashima et al. (US 6,729,154).

Regarding claims 1 and 7, Gunji et al. teach an indoor unit (100) of an air conditioner (see Fig. 1 and para. 54), the indoor unit having a rear portion (area of base panel 110) configured to be mounted to a vertical indoor wall surface (see para. 3; indoor unit 100 is capable of being mounted to a wall), the indoor unit comprising a ventilation fan (400), a heat exchanger having an approximate V-shape (500, 510, 520) (see Fig. 4 and para. 55) in which refrigerant flows that are connected thereto (para. 62) and which is disposed so as to cover the upper portion of the ventilation fan (400) (see Fig. 4) and a support unit (120,121) supporting the ventilation fan (400) and the heat exchanger (500, 510, 520) (see Fig. 3 and Fig. 4), the support unit (120,121) including a rear end (area of base panel 110) disposed adjacent the indoor wall surface when the indoor unit is mounted to the indoor wall surface (see para. 3; indoor unit 100 is capable of being mounted to a wall), a bottom surface (area of outlet port 303) extending outwardly relative to the indoor wall surface when the indoor unit is mounted to the indoor wall surface (as illustrated in figure 4, the area of outlet port 303 extends from a wall toward air outlet

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port 125), an upper surface (fixed grille 210) extending outwardly relative to the indoor wall surface as it extends from the wall and spaced upwardly from the bottom surface (as illustrated in figure 4, fixed grille 210 extends from back surface member 110 toward front end frame 211), and a tongue portion (124) extending upwardly from the upper surface to cover the ventilation fan (see Fig. 4) and an upper casing (220) removably mounted to the support unit (120) to cover the heat exchanger (500, 510, 520) and ventilation fan (400) (para 65 lines 1-9). Additionally, Gunji, et al. teach the tongue portion (124) extending upwardly from the upper surface (side facing toward the ventilation fan) and that is positioned at a height no higher of an apex of the ventilation fan (400) when mounted to the indoor wall surface (see Fig. 3 and Fig. 4 and para 58 lines 1-6) and the support unit (120,121) being configured such that the ventilation fan (400) is rotatably supported on the support unit (see Fig. 3) with the tongue portion (124) adjacent to the rear portion (see Fig. 3 and Fig. 4) and support unit (120,121) lies above the apex of the ventilation fan (400) when mounted to the indoor wall surface (see Fig. 4) and a heat exchanger (500, 510, 520) that is connected to lines (129) in which refrigerant flows are installed (see para. 62) to the support unit (121,124) (see Fig. 3). The recitation of "approximate inverted V-shape in cross-section" has been interpreted as a plurality of the heat exchangers combined to form a bent shape.

Gunji et al. fail to explicitly teach that the support unit lies entirely below the apex of the ventilation fan and that the support unit and the ventilation fan being further configured such that the apex of the ventilation fan is visible as viewed along the horizontal direction from a rearward side of the tongue portion before installation of the upper casing and the heat exchanger and before mounting the indoor unit to the indoor wall surface.

Takashima et al. teach a wall mounted indoor air conditioning unit (see figure 1) that includes a base panel (110) mounted to a wall (11), wherein the air conditioning unit includes a support unit (111) for the heat exchanger (illustrated in figure 1) and a tongue portion (annotated below), wherein the support unit and tongue portion does not extend to the apex of a fan (2) (illustrated in figure 1) enabling viewing of the apex of the fan from the rear absent the base panel (illustrated in figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the air conditioning unit of Gungi et al. to place its tongue portion below the apex of the ventilation fan as taught by Takashima et al. in order to collect condensation and to enable maximum heat exchange to heat exchanger 520 by enabling more air blown by the ventilation fan to contact the heat exchanger, thus improving cooling efficiency.

Regarding claim 2, Gunji et al. teach an indoor unit (100) of the air conditioner wherein the heat exchanger (500, 510, 520) is disposed so as to cover front, upper and rear portions of the ventilation fan (400) (see Fig. 12).

Regarding claim 3, Gunji et al. teach the indoor unit (100) of the air conditioner wherein the heat exchanger (500, 510, 520) is installed on the support unit (121) on which the ventilation fan (400) has already been installed (see Fig. 3 and Fig. 4).

Regarding claim 4, Gunji et al. teach the indoor unit (100) of the air conditioner comprising an electrical component box (140) that accommodates electrical components (see

Fig. 12 and para. 56), and which is supported by the support unit (121) so as to be at the height no higher than the apex of the ventilation fan (400) and wherein the electrical component box (140) is installed on the support unit (120) (see Fig. 3 and Fig. 12).

Regarding claim 5, Gunji et al. teach the indoor unit (100) of the air conditioner wherein the ventilation fan (400) has a cylindrical shape (see Fig. 3 and Fig. 4) and is disposed so that a central thereof is horizontal (see Fig. 3) and the indoor unit further comprises a drive device (410) that rotatively drives the ventilation fan (400) and is disposed on the same axis as the ventilation fan (400) (see Fig. 3 and para. 57) wherein the electrical component box (140) is disposed so that the electrical components are lined up in the axial direction with the drive device (410) (see Fig. 3 and para 57).

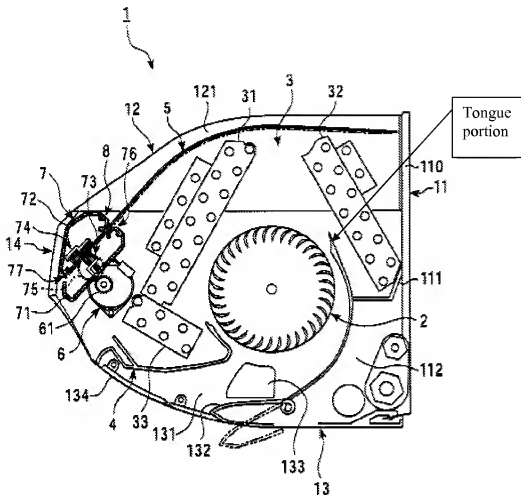
Regarding claim 6, Gunji et al. teach the indoor unit (100) of the air conditioner further comprising a drive device (410) that rotatively drives the ventilation fan (400) (see Fig. 3 and para. 57) wherein the support unit (121) supports the ventilation fan (400) (see Fig. 3), the electrical component box (140) and the drive device (410) from below when viewed from the front support unit (120,121) (see Fig. 3 and Fig. 4 and para. 57) and the lower surface of the support unit (120) is formed to be flat (see Fig. 3). It is presumed to be that the ventilation fan (400), electrical component box (140) and drive device (410) all rest atop the support unit (120, 121). The recitation of "flat" is interpreted to be anything that is horizontally level as illustrated in Fig. 3.

Regarding claim 10, Gunji et al. teach the support unit (121,120) includes a discharge port (125) in communication with the ventilation fan (400) (see Fig. 5 and para 59 lines 1-4).

Regarding claim 11, Gunji et al. teach the upper casing (220) arranged to fit to an upper region of the support unit (121,120) (see Fig. 4 - attached at 128), such a horizontal intersection line between the upper casing and the support unit (see Fig. 4).

Regarding claims 12, 13 and 15, Gunji, et al. teach a rear access opening (125) is formed between the upper surface of the support unit (120) and upper casing when the upper casing is mounted to the support unit to cover the heat exchanger (500, 510, 520) and ventilation fan (400) (see Fig. 4), the indoor unit further comprises a back surface member (300) removably mounted to cover the rear access opening (see Fig. 2).

Regarding claims 14 and 16-17, Gunji et al. teach the back surface member (300) is configured to be installed on an indoor wall surface to support (via the support unit 120 - see Fig. 2).



Response to Arguments

6. Applicant's arguments with respect to claim 1-7 and 10-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIM RAHIM whose telephone number is (571) 270-1998. The

examiner can normally be reached on Monday - Thursday 7am - 3pm EST and Friday 7am - 9:30am EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. R./
Examiner, Art Unit 3744
3/11/2009

/Frantz F. Jules/
Supervisory Patent Examiner, Art Unit 3744